BEFORE

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2020-1-E—ORDER NO. 2020-__

In the Matter of:)	
Annual Review of Base Rates for Fuel Costs of Duke Energy Progress, LLC)	PARTIAL PROPOSED ORDER
))	

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina ("Commission") on the annual review of base rates for fuel costs of Duke Energy Progress, LLC ("DEP" or "Company"). The procedure followed by the Commission is set forth in S.C. Code Ann. § 58-27-865 (2015), which provides for annual hearings to allow the Commission and all interested parties to review the prudence of the fuel purchasing practices and policies of an electrical utility and for the Commission to determine if any adjustment in a utility's fuel cost recovery mechanism is necessary and reasonable. Additionally, and pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental or avoided costs incurred by the Company to implement the Distributed Energy Resource Program ("DERP") previously approved by the Commission.

1. Notice and Intervention

By letter dated December 9, 2019, the Clerk's Office of the Commission instructed the Company to publish a Notice of Hearing and Prefile Testimony Deadlines ("Notice") in newspapers of general circulation by March 2, 2020 and provide Proof of Publication on or before March 23, 2020. The letter also instructed the Company to furnish the Notice to each affected customer and provide a certification to the Commission on or before March 23, 2020, that notification has been furnished.

On December 9, 2019, the Clerk's Office also issued a Prefile Testimony Letter indicating the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On January 17, 2020, the Company filed with the Commission affidavits demonstrating that the Notice was duly published, and on March 23, 2020, the Company filed with the Commission a letter certifying that a copy of the Notice was furnished to the Company's retail customers in South Carolina in accordance with the instructions set forth in the Clerk's Office letters dated December 9, 2019.

Petitions to Intervene were received from the Southern Alliance for Clean Energy ("SACE") and South Carolina Coastal Conservation League ("CCL") (together, "SACE/CCL"), and Nucor Steel. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party pursuant to S.C. Code Ann. § 58-4-10 (B). There was no opposition to any of the Petitions to Intervene and the Commission issued Orders granting each Petition to Intervene.

¹ On February 13, 2020, the Company discovered that an insufficient number of customer bill inserts were printed, and customers whose bills were mailed on February 13 and February 14, 2020 did not receive the bill insert. By letter dated February 17, 2020, DEP requested permission from the Commission to issue the notice via separate mailing to the 7,600 affected customers so they would receive the Notice prior to March 2, 2020. The Commission granted this request in Directive Order No. 2020-139 on February 19, 2020.

II. THE COMMISSION'S JURISDICTION

In accordance with S.C. Code Ann. § 58-27-140 (1), the Commission may, upon petition, "ascertain and fix just and reasonable standards, classifications, regulations, practices or service to be furnished, imposed, observed, and followed by any or all electrical utilities." Further, S.C. Code Ann. § 58-27-865 (B) states, in pertinent part, that "[u]pon conducting public hearings in accordance with law, the commission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the commission to be appropriate for that period, adjusted for the under-recovery or under-recovery from the preceding twelve-month period."

Consistent with the requirements of S.C. Code Ann. § 58-27-865 (B), the Commission convened an evidentiary hearing to determine the reasonableness of the Company's proposed rates to recover fuel costs.

III. DISCUSSION OF THE HEARING, IN PERTINENT PART²

The Commission convened a virtual public evidentiary hearing in this matter on June 9, 2020, with the Honorable Florence P. Belser presiding as Chair. Representing the Parties and appearing virtually before the Commission were Samuel J. Wellborn, Esquire, and Katie M. Brown, Esquire, for the Company; J. Blanding Holman, IV, Esquire, Kurt D. Ebersbach, Esquire, and Katherine N. Lee, Esquire, for SACE/CCL; Robert R. Smith, II, Esquire, and Michael K. Lavanga, Esquire, for Nucor Steel; and Andrew M. Bateman, Esquire, and Christopher M. Huber, Esquire, for ORS. DEP and ORS presented witnesses regarding the Company's base rates for fuel costs. SACE/CCL presented witness Gregory

² SACE/CCL took a narrow interest in this case regarding natural gas pipeline capacity. As such, this Proposed Order's discussion of the case is limited to that topic.

M. Lander regarding the Company's management of its contracts on interstate natural gas pipelines to deliver gas to the Company's gas-fired generating units.

1. Mr. Lander's Testimony

Mr. Lander presented both direct and surrebuttal testimony regarding DEP's use of its existing firm pipeline capacity over the review period of March 1, 2019 through February 29, 2020. Mr. Lander presented the following conclusions:

First, based on data provided by DEP during discovery, Mr. Lander testified that DEP made good utilization of its long-term firm capacity, with a load utilization factor exceeding 71% over the review period.³ Lander Direct Test. at 4. He testified that DEP was able to reliably meet peak hourly demands through the use of its existing contractual network and from swing services provided by local distribution companies and/or the Transco pipeline. *Id.* at 13. Mr. Lander found no indication that DEP needs additional firm pipeline capacity or that such additional firm capacity would be economically justified. *Id.* at 14; Tr. at 134.8–134.14.

Second, despite DEP's relatively high utilization of its long-term capacity, Mr. Lander found that there were periods when much of that firm capacity lay idle. Based on the data provided by DEP in discovery, Mr. Lander found that there were 150 days where, even if the Companies (DEP together with its affiliate, Duke Energy Carolinas ("DEC")) had burned the equivalent of their maximum hourly burn for all 24 hours of the day (an extremely conservative assumption), they would have at least 50,000 dekatherms sitting idle for the entire day. Lander Direct Test. at 15. Based on this finding, Mr. Lander

³ A load utilization factor measures the extent to which the Company makes use of its existing firm capacity. The higher the load factor percentage, the better the utilization of long-term contracted capacity.

recommended that DEP be required to monetize its unused capacity or show why such monetization is impossible. *Id.* at 17; Tr. at 136.3–136.5.

Finally, Mr. Lander provided testimony regarding the quality of the data produced by the Company in accordance with the Commission's Order in last year's DEC fuel cost proceeding. That Order directed DEC to have "hourly and daily metered usage" available for production in "future fuel cases." Order No. 2019-691, Docket No. 2019-3-E. The Commission's Order was based partly on testimony by Mr. Lander that the DEC should track its gas pipeline utilization at a more granular scale to determine if there were opportunities to resell unused capacity. Likewise, DEC witness Phipps testified in that proceeding that DEC could track this information. The Commission ordered that it do so given the potential benefits to ratepayers from selling unused capacity.

In this proceeding, Mr. Lander generally commended DEP for its efforts to provide this more granular data. Nevertheless, Mr. Lander found gaps and inconsistencies that limited the data's usefulness for assessing potential benefits (or costs) to ratepayers. For example, Mr. Lander noted that DEP listed the same plants by different names in different responses and often failed to distinguish between combined cycle and combustion turbines at the same pipeline delivery locations. Lander Direct Test. at 5. In addition, Mr. Lander found that the flow data provided by DEP did not separate out combustion turbine gas usage at locations having both combined cycle and combustion turbine units. *Id.* at 18. Nor did the data indicate to what extent combustion turbines were burning fuel oil instead of natural gas. *Id.*; Tr. at 135.3–135.12.

Mr. Lander testified that such information was critical to assessing DEP's overall gas needs. *Id.* Therefore, Mr. Lander recommended slight refinements to the granular

data tracked and provided by the Company—specifically, that DEP collect and provide for each generation unit its hourly generation, unit type (combined cycle or combustion turbine) and the type and quantity of fuel consumed by hour. Lander Direct Test. at 18; Tr. at 136.9–136.13.

2. Testimony of James J. McClay, III

As part of its direct case DEP presented rebuttal testimony from James J. McClay, III, who is the Director of Trading for Duke Energy Corporation. Mr. McClay provided additional background on the Companies' management of natural gas capacity supply and transportation capacity. In addition, Mr. McClay responded to the testimony and recommendations offered by Mr. Lander on behalf of SACE/CCL.

First, Mr. McClay testified that the daily and hourly usage information provided by DEP in discovery were simply estimates. This fact and other technical issues affecting the data's reliability made it unsuitable for "making recommendations or decisions that impact customer rates." McClay Rebuttal Test. at 5. Based on data from end-of-month reconciliations, which the Company considers "revenue grade," Mr. McClay testified that DEP's actual level of utilization was closer to 88% for the review period. Tr. at 50.20–51.2.

Second, Mr. McClay testified that the Companies lack sufficient firm capacity to serve their generation requirements. Mr. McClay stated that Transco is the Companies' sole source of interstate transportation capacity for their natural gas generation portfolio. He testified that Transco instituted several changes to its tariff in July 2019 that limit intraday swings and impose penalties for unauthorized daily overrun services above a specified tolerance. Tr. at 51.12–51.25. As a result, according to Mr. McClay, the

Companies are deficient in firm capacity. Tr. at 83.15–83.16. However, Mr. McClay provided no estimate of the amount of firm capacity he believes the Companies need to acquire or how much it would cost. And on cross examination, Mr. McClay conceded that DEP was able to meet its needs in excess of firm capacity throughout the review period. Tr. at 80.6–81.3. Notably, DEP is not seeking approval to add firm capacity in this case.

Third, Mr. McClay disputed that the Companies have extra capacity to monetize by releasing it into the market. Mr. McClay testified that the Companies maintain idle capacity to address intraday needs, late-cycle storage adjustments, and post-cycle penalty mitigation, and to protect customers from pipeline imbalance penalties. Tr. at 52.1–52.6.

Finally, Mr. McClay testified that information provided by the Company in discovery was consistent with that required by the Commission's order in the 2019 DEC fuel case. Mr. McClay reiterated that hourly usage data is not revenue grade and should not be used in making recommendations or decisions that impact customer rates. According to Mr. McClay, even the Commission should not attempt to use the data in this way, despite seeking it for that very purpose. Tr. at 57.19–58.24.

Mr. McClay testified that the reliability of hourly usage data was further limited by "technical issues" affecting the dashboard tool developed by the Companies to track this information.⁴ Tr. at 50.13–50.17. For example, the tool did not access all plant data during the entire review period. Tr. at 64.9–64.24. However, he stated that the Companies

⁴ The Companies began developing the dashboard two years ago in response to operational limitations instituted by Transco; the tool was not developed in response to last year's order in DEC fuel case. Tr. at 77.22–78.1. The dashboard tool is what "everyone uses" to monitor burns and manage capacity. Tr. at 70.15–70.16. The Companies put "thousands of hours" into developing the tool, which is now used by their gas team, their unit commitment personnel, their real-time power group, and all managers. Tr. at 74.10–74.13.

are working to rectify those issues. Tr. at 65.3–63.5. As Mr. McClay testified, "we'll always work toward better data quality ... and we'll always strive to give whatever is ... needed." Tr. at 84.19–84.21.

In addition to the provisional data from its dashboard tool, the Companies have monthly and daily "actual burn" data. This information was available at the outset of the proceeding and should be available at the outset of future fuel proceedings. Tr. at 79.17–79.20. The Companies obtain this data from end-of-month reconciliations with the pipeline. Tr. at 59. These final numbers from the Transco pipeline, which the Companies consider "revenue grade," reflect how much gas was burned daily at each facility, but the pipeline's figures do not capture hourly usage. Tr. at 60.6–60.9. Mr. McClay disputed the relevance of hourly data in determining the Companies' long-term capacity needs. Tr. at 51.3–51.11.

The dashboard tool does not collect fuel oil burn data, but that does not mean the Company has no such information to produce. While stating that the Companies do not burn much fuel oil, Mr. McClay testified that relevant data are "entered into a system by the plant the next day, the actual oil burns, gallons of oil that had been burned." Tr. at 91.7–91.11.

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⁵ SACE/CCL sought and obtained this data but were unable to match it to the "actual burn" information reflected in Figure 1 of Mr. McClay's rebuttal testimony. At the hearing, Mr. McClay explained the reason for the discrepancy: his Figure 1 is based on actual burn data for both DEP and DEC, whereas SACE/CCL had purportedly sought such information only for DEP (and were given only that). But in seeking this data, SACE/CCL expressly defined the term "Company" to include "affiliates" of DEP. DEC is an affiliate of DEP, as Mr. McClay recognized. *See* Tr. at 67.1–67.2 (stating that DEC is "the face to the market under the *affiliate* asset management supply agreement." (emphasis added)). Actual burns are not specific to either entity – "we manage it together the same way we manage the transport." Tr. at 67.5–67.6. Thus, it appears DEP went out of its way to provide only a portion of actual burn information, when SACE/CCL in fact sought all of it.

IV. FINDINGS OF FACT AND CONCLUSIONS OF LAW

Having heard the testimony of the witnesses and representations of counsel and after careful review of the record, the Commission makes the following findings of fact and conclusions of law:

1. Data Granularity and Consistency

The Commission reaffirms its directive from last year's DEC fuel proceeding, that the Companies should continue to track and have available for production its hourly and daily metered usage information. The Commission ordered that this information be tracked because of the potential benefit to ratepayers from sales of any unused capacity. The information also has relevance to potential costs ratepayers may be asked to bear if DEP seeks to procure additional firm capacity.

While Company witness McClay sought to dispute the relevance of this information to the determination of its long-term capacity needs, the Commission finds and concludes otherwise. The record is clear that on an operational basis, hourly data is quite important to the Company. Indeed, the Companies developed the dashboard tool and use it widely to manage their way around daily constraints imposed by Transco. Tr. at 77.22–78.25. Hourly flow projections—even if they are just estimates—are vital to this function. The Companies receive notifications through the dashboard if they're going outside of the limits set by Transco. As Mr. McClay explained, the dashboard features a dial allowing Company personnel to "look at the numbers, they can look *at the hour*, and they can make adjustments at night." Tr. at 70.1–70.3 (emphasis added). To keep gas burn within the specified tolerance levels, the Companies will buy or sell power, or ramp down a unit. Tr. at 71.3–71.4. The Companies does not use Transco data for this purpose

because it is "two hours behind, so that doesn't help us." Tr. at 74.25–75.2. The Companies have already improved the dashboard tool by instituting "integrity alerts" so that "if all of the sudden a reading for *an hour* goes to zero, we'll get an alert." Tr. at 65.13–65.16 (emphasis added).

Because of the technical issues affecting the quality of the dashboard data, the Companies will sometimes turn to other data to derive "hourly burn," such as taking MWs produced and dividing by the heat rate of the plant. Tr. at 90.3–90.10. In those instances, Mr. Clay testified, "we'll use that data because it's the best we have." *Id*.

Cleary, then, hourly data is quite important to the Companies at the operational level. As Mr. McClay discussed, the Companies rely on the dashboard tool and other real-time data points in order to protect customers from penalties for exceeding Transco limits. Tr. at 73–75. And as Mr. Lander testified, "the hour is the interval at which having firm pipeline capacity matters." Lander Direct Test. at 12. For reliability purposes, the Companies must be prepared to meet the peak hour of demand on any given day. Moreover, hourly usage is important due to the very sorts of pipeline-imposed limitations that the Companies say they built the dashboard to address. As Mr. Lander noted, the overwhelming majority of pipeline services only obligate the pipeline to provide 1/24th of daily quantities in any given hour (a 4.16% hour). *Id.* Thus, to understand how much firm pipeline capacity the Companies would need to serve their hourly peak, it is necessary to know the Companies' hourly peak usage from the review period.

While the dashboard data are not perfect, the Companies are continuously working to improve the tool. And despite the tool's imperfections, Mr. McClay's testimony showed the Companies use it widely to make contractual, market purchase, and

contract penalty avoidance decisions, all of which protect customers from unnecessary costs. Tr. at 71.4 – 73.10. The dashboard data, together with the more reliable (though less granular) burn data coming from end-of-month reconciliations, provide parties and this Commission with valuable insights into the Companies' management and use of their long-term capacity. In assessing whether the Companies have made prudent use of their existing capacity—and to make related determinations about whether the Company could have sold idle capacity or needs additional firm capacity—the Commission and parties should continue to have access to this more granular data in future fuel proceedings.

Nevertheless, the Commission expects the Companies to continue to improve and refine the tool, as they have pledged to do. The Companies should work to improve the completeness and consistency of the data, including by standardizing its use of plant names and distinguishing between unit types at facilities having both combined cycle units and combustion turbines.

Finally, regarding the issue of fuel oil burns, the record is clear that the amount of data is limited but that it is collected (albeit by a different means than the dashboard tool). Because the Companies track and record this data, they should have it available for production, upon request, in future fuel proceedings.

2. Use and Sufficiency of Long-Term Firm Capacity

DEP did not acquire any new long-term firm capacity over the review period and is not currently seeking any costs for the acquisition of such firm capacity. While witness McClay disagreed with Mr. Lander's conclusion that the Companies have sufficient firm capacity, he gave no testimony regarding the amount of additional firm capacity the Companies feel they need, nor did he specify the potential costs to ratepayers from

adding such new capacity. Moreover, Mr. McClay testified extensively as to DEP's day-to-day fuel operations including how the Companies supplement their firm capacity with short-term acquisitions, swing services, and other facilities and services. Mr. McClay admitted that DEP was able to provide reliable service over the review period, and avoid any pipeline penalties, with its existing portfolio of options. We see no indication that DEP will be unable to meet its service obligations going forward in a similar fashion. We note that ultimately, ratepayers—not DEP—would pay for any costly acquisitions of additional firm capacity.

We conclude that, absent a change in circumstances, DEP has not demonstrated a need for additional firm capacity. If DEP seeks such an addition in the future, it must (1) demonstrate why its needs cannot be met with its existing contractual network and available short-term measures, such as swing services and purchases of delivered gas from sellers holding existing capacity on the pipeline; and (2) provide a cost comparison of new long-term firm capacity additions versus the continued use of such short-term measures to supplement its existing firm capacity.

3. Ability to Monetize Idle Capacity

As noted, the potential to sell unused capacity to benefit ratepayers is what motivated the Commission to order the Companies to track and provide hourly and daily metered usage data. While DEP disputes whether the granular data tracked by its dashboard tool is reliable for such determinations, the record is clear that the Companies themselves rely on the dashboard tool for this very purpose. The Companies use the tool to navigate operational limitations imposed by Transco and to avoid costly penalties that ratepayers would have to pay. This, in turn, underlies DEP's claim that it lacks idle

capacity to sell. In Mr. McClay's words, the Companies retain idle capacity to "protect our flank, because we're playing defense every day." Tr. at 72.23–72.24.

At the same time, however, DEP acknowledges infirmities in the data due to technical issues with its dashboard tool. Although the Companies are working to fix these infirmities, they do lessen the reliability of the data for the purpose of interest to this Commission. Until those infirmities are addressed, the Commission is unable to make any final determination regarding whether the Companies have unused capacity that could be sold to benefit ratepayers. In short, like DEP's claim that it needs some unspecified amount of new firm capacity, the determination of idle capacity must await a more complete record.

IT IS THEREFORE ORDERED THAT:

- 1. DEP shall work to improve the completeness and consistency of its hourly and daily metered natural gas usage data, including by standardizing its use of plant names and distinguishing between unit types at facilities having both combined cycle units and combustion turbines.
- 2. The Company shall continue to track and record data on hourly fuel burns, and make such data available for production, upon request, in future fuel proceedings.
- 3. If DEP seeks to add firm capacity in any future proceeding, it must (1) demonstrate why its needs cannot be met with its existing contractual network and available short-term measures, such as swing services and purchases of delivered gas from sellers holding existing capacity on the pipeline; and (2) provide a cost comparison of new long-term firm capacity additions versus the continued use of such short-term measures to supplement its existing firm capacity.

BY ORDER OF THE COMMISSION:	
	Comer H. Randall, Chairman
ATTEST	
Florence P. Belser, Interim Vice Chair	_
(SEAL)	

STATE OF SOUTH CAROLINA BEFORE THE PUBLIC SERVICE COMMISSION DOCKET NO. 2020-1-E

In re: Annual Review of Base Rates for Fuel Costs of Duke Energy Progress, LLC	CERTIFICATE OF SERVICE

I certify that the following persons have been served with one (1) copy of the Partial Proposed Order filed on behalf of the South Carolina Coastal Conservation League and Sothern Alliance for Clean Energy by electronic mail and/or U.S. First Class Mail at the addresses set forth below:

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June 19, 2020

/s/ Emily E. Selden